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ABSTRACT

A study examined Maryland high school teachers' attitudes toward specific individual characteristics of the Maryland Writing Test as well as their overall attitudes toward the test. Subjects, 538 English/language arts, mathematics, science, and social studies teachers in Maryland's 176 public high schools, responded to a survey designed to elicit responses on each of the 18 identified distinguishing characteristics of the writing test. Through a proportional random sampling procedure, a total of 1,220 surveys were sent to the teachers. Results indicated that: (1) 97% of the subjects have favorable total overall attitude scores on the survey instrument; (2) as a group, English/language arts teachers had a higher percentage of teachers with "more-than-important" attitudes toward the test than do those in groups of mathematics, science, and social studies teachers; (3) no moderate or strong differences existed in the total overall attitude scores teachers had based on the number of years they have taught; and (4) teacher in all groups had favorable attitudes toward the 18 identified characteristics of the test. (Seventeen tables of data are included; 24 references, a list of the panel of experts who assisted in development of the survey instrument, an information sheet about the Maryland Writing Test, and the survey instrument are included.) (RS)

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"High School Teachers' Attitudes Toward a Statewide High Stakes Student Performance Assessment"

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High School Teachers' Attitudes Toward a Statewide High Stakes Student Performance Assessment

Introduction

The improvement of American students' academic performance is considered essential if the country is to remain profitable and competitive in an international economy. For this to occur, high school students specifically need to be able to read, write, compute, speak, listen, study productively, reason, and work effectively with others (The College Board, 1984). There seems to be a clear imperative in society to significantly improve K-12 education, as evidenced by the set of national educational goals that were the outcome of The National Governors' conference held in the Fall of 1989 in Charlottesville, Virginia, and the number of governors and legislatures which have or are in the process of mandating education reform in their states. Virtually all of these efforts incorporate assessment in order to document progress.

Pencil-and-paper standardized norm-referenced multiple-choice tests have come under new criticism recently. Opponents of their use, along with claiming that those tests measure too narrow a range of student abilities to be helpful and that their results cause misdirected changes in instructional strategies, have also claimed that results are often flawed because of the selective suppression of lowest individual scores and breached security of test answers. These opponents who typically are also supporters of alternative assessments, commonly argue that performance assessments will measure a much wider range of student abilities, will cause appropriately directed changes in instructional strategies, and that their results will be much less flawed since breached security of test "answers" of performance assessments is of little concern as compared to multiple-choice test "answers."

The following points of view about the use of standardized tests and the possible use of performance assessments seem to be representative of the discussion on the topic. Albert Shanker, President of the American Federation of Teachers, speaks in negative

terms about the continued use of standardized tests, "...Rather than rely on such flawed measures to judge school performance, schools should scrap standardized tests as they are now." (in Rothman, 1989). And perhaps Richard J. Shavelson, Dean of the Graduate School of Education at the University of California at Santa Barbara, best expresses at least one important positive reason for the use of performance assessments when he states "If schools spend three or four weeks a year teaching to a performance based test, at least they will be teaching things they ought to be teaching in ways they ought to be teaching it." (in Rothman, 1989).

It is not on purpose to contribute to this debate. Rather, we note that as the discussion about the types of assessments to be used in the educational reform movement of the 1990's in America continues, there is a clear move toward the use of performance assessments and away from the use of machine-scorable tests.

Maryland is but one example of a state in the process of K-12 education reform. In 1989 a Governor's Commission on School Performance submitted its final report to the governor of Maryland. In addition to making seven other recommendations that will have significant impact on public education in Maryland, the report calls for "...the establishment of more comprehensive assessment systems at the state and local levels to identify exc[illegible]ence, to uncover problem areas, and to point the way toward improvement. The state should replace its current testing programs." (Sondheim, 1989).

Maryland and other states, such as Connecticut, California, New York, Kentucky, and Vermont are making fundamental changes in K-12 education (*Education Week*, January 31, 1990). Teaching and learning are expected to change. New roles for students as active learners and teachers as facilitators of learning are expected to emerge as two of the outcomes of these changes. It is crucial for educators and policy-makers to understand the nature of these changes, how those changes may impact on students and teachers, and it is especially important for them to put into place policies that will provide the "best chance" for these changes to affect the outcomes of K-12 education.

Performance Assessment

Performance assessment is a process of systematic data gathering that uses a variety of instruments and procedures (Berk, 1986); an approach to measuring student achievement "by means of observation and professional judgment." (Stiggins, 1987). Performance assessments attempt to place students in problem-solving and other process settings. Since performance assessments attempt to measure students' ability to use the knowledge they possess directly, it is felt by many that those assessments can best address the concerns being raised about the quality of public K to 12 education.

Several other characteristics of performance assessments are important. For example,the scores on performance assessments are criterian-referenced. In typical practice, students' scores are not compared to one another and reported as they are in norm referenced tests; they are compared to the criteria previously established. Scoring guides and score points on performance assessments do not have a predetermined percent of students who must fall in their categories

Further, performance assessments, again unlike many standardized tests which require students to complete the test in a predetermined amount of time, usually have no time limit for students to complete the assessment. In some cases, performance assessments occur over a period of days, weeks, or even months.

Most statewide tests do not report information about the degree to which students can use what they know, nor do they provide information about how effective students might be at handling tasks such as those requiring written and verbal communication, computation, speaking and listening, and synthesis and analysis that might be asked of them by employers and post-secondary institutions. However, while performance assessments provide at least intuitive comfort to those responsible for determining the academic achievement of students, and for reporting it to the public, it is important to remember that those forms of assessment must achieve the high levels of statistical reliability and validity, as do standardized pencil-and-paper multiple-choice norm-

referenced tests. Reliability and validity issues cannot be overlooked in any important form of assessment.

Teachers' Roles in New Assessments

The reform initiatives underway in most states seem to have as their focus attempts to answer two questions. The first question asks what the outcomes of K-12 education should be while the second question asks what methodology is best to determine the degree to which those outcomes have been realized. Discussion and debate about what the outcomes of K-12 education should be is interesting to all educators; however, we will briefly discuss methodologies that seem likely to be used to measure student achievement outcomes and then will concentrate on the role teachers will likely play in new state-wide assessment programs. Of special interest is the question of teachers' attitudes toward those new roles.

It is becoming increasingly clear that the K-12 educational reform currently under way in the United States will likely include new assessments intended to determine students' academic achievement. It is also clear that at least some of the assessments used for this purpose, such as performance assessments, will require teachers to be active participants in the assessment activity and/or at least in the preparation of their students for the assessments. This active role in assessment activities is both new and not new for teachers. The active role is new in the sense that teachers in the past have participated in state-wide assessments primarily as proctors of the tests that have dominated large-scale assessments for the past 30 years (Jett, 1991); however, an active role in the classroom assessment of student performance is not new to teachers since they, in fact, spend up to one-third of their instructional time engaged in such activities (Stiggins, 1987).

Because of the impending changes in K-12 education as indicated above, it is likely that classroom teachers will, in addition to becoming active participants in state-wide assessments of their students' academic achievement, be expected to use assessment activities for instructional purposes in their daily teaching. This means that the often used

phrase "blurring the line between instruction and assessment" is likely to become more of a reality in many teachers' classrooms in the not too distant future as teachers respond to the desired outcomes of the state-wide assessment their students will encounter. Thus, a crucial factor to the success of K-12 educational reform seems to be the attitudes classroom teachers have toward performance assessments.

The Effects of Teachers' Attitudes on the Outcomes of Testing

As indicated above, numerous studies have found that teachers generally have favorable attitudes toward testing (Dorr-Bremme, 1983). This finding is contrary to the popular but inaccurate belief that teachers view testing negatively (Schafer and Lissitz, 1987). The issue of whether teachers have favorable or unfavorable attitudes toward testing is germane to this discussion since their attitudes can and do affect the outcomes of testing. In the opinion of Green and Stager (1985), "teachers' attitudes toward the tests they give and toward the practice of testing can influence many facets of education" (p. 141). They also identify the specific facets of education they believe are affected by teachers' attitudes toward the tests they give (Green and Stager, 1985). These are: "the quality of tests given, the meaning in test scores, the way in which information from tests is used, the evaluations made by students and parents as well as by the teacher, and the students; perceptions of themselves, the school, and the instructional process" (p. 4). Further, Green and Stager (1985) report that test results affect teachers' perceptions of themselves, in a professional evaluative sense, and that teachers' attitudes toward testing are part of teachers' overall attitudes toward teaching itself.

In a study conducted in the Portland, OR school system, Griswold (1988) found that "Teachers are pivotal actors in the implementation of performance-based education, change, and in evaluation of student performance" (p. 3). In another study significant to this one, Kimpston and Anderson (1985) examined teachers' and principals' concerns about the implementation of what is known as "benchmark testing" in a school system. The study focused on participants' concerns, feelings, beliefs, attitudes, and the degree

which they were "positively disposed" (p. 103) toward a change to benchmark testing. They report that "... the success or failure in implementing benchmark testing in the school district will ultimately depend upon staff acceptance of this mandated change" (p. 103). Staff acceptance can be connected to teachers' attitudes toward the change. In another study, Berman and Pauly (1975) found that the commitment of teachers was the most significant among four other variables to the successful implementation of new programs and their outcomes.

Researchers in England have also studied the topic of teachers' attitudes toward testing, assessment, and, as known in at least one school system there, "Pupil Profiling." Harvey and McGovern (1985) developed an attitude scale they used to determine teachers' attitudes toward six aspects of testing, including the pupil profile method. It was their view that teachers' attitudes toward the new system, as well as their attitudes toward other aspects of testing, would be significant to the success of the pupil profile system (Harvey and McGovern, 1985). Their research was based primarily on the belief that teachers' favorable attitudes toward the new assessment will be the key to the success of that assessment.

In the work of Rice and Higgins (1982), cited previously, a very practical connection between teachers' attitudes toward testing and potential impact they have on the outcomes was found. As teachers' opinions (attitudes) toward standardized achievement testing varied, so did the classroom procedures they used for administering the tests. This was true in the procedures used among teachers to organize their rooms for tests, the explanations and instructions they provided to students, and the frequency of teacher and student interaction that occurred during testing (Rice and Higgins, 1982).

Attitudes of teachers influence the success of all educational efforts, and it is especially true that their attitudes toward a statewide assessment of students' academic achievement influences the success of the assessment efforts in Maryland's education reform initiative. Through a determination of Maryland's high school teachers attitudes

toward a currently used performance assessment, the Maryland Writing Test, it may be possible to inform developers of additional performance assessments for use in statewide assessment programs that are an important part of K to 12 education reform initiatives in Maryland and elsewhere in the country. Teachers' attitudes toward the assessment methodology used in new statewide assessment programs will likely be significant to their acceptance of the results of the assessment, and through their natural contact and influence with parents of the students they teach and the general public, they will influence overall public acceptance of the assessments' results.

Focus of the Study

The Maryland Writing Test is a performance assessment currently in use in a high stakes statewide assessment program. High school teachers' attitudes toward the test are the focus of this study. The results are intended to provide information concerning high school teachers' attitudes toward the specific individual characteristics of the test as well as their overall attitudes toward the test.

Characteristics of the Maryland Writing Test

The instrument used in this study was developed with the help of six experts (see Appendix A) who possessed unique and intimate professional knowledge of the Maryland Writing Test. These panel members were professionally recognized in Maryland and elsewhere in the country for their expertise in writing assessment, program evaluation, and especially for their expertise concerning the Maryland Writing Test. The panel of experts determined that the Maryland Writing Test has 18 distinguishing characteristics.

The characteristics can be organized according to four phases of assessment. The phases were arbitrarily identified and we recognize that others may place them in phases of

assessment other than these or other than is indicated. The numbers originally assigned by the panel to each characteristic are used below.

- Test development and design
  1. Same prompts used for all students
  5. Score scale developed and maintained by Maryland teachers
  9. Students know score criteria before test
  12. Students must pass test to graduate
  15. Test first given in ninth grade
  16. Students have multiple opportunities to pass test
  18. Appeal and review is available for seniors
- Test administration
  10. During test students have scoring criteria
  13. Test is administered in two sessions
  14. Students have unlimited time for test
  17. Test is most often administered by students' teachers
- Assessment criteria
  2. Total scores are based on two prompts
  3. Modified holistic scoring is used
  4. Score scale has four score points
  11. Score criteria for test are consistent over time
- Scoring
  6. Two raters independently score essays
  7. Scoring is by trained raters
  8. Raters are not Maryland teachers

Survey Instrument

The survey instrument contained a total of 28 items, 10 of which asked for demographic and other information about the respondent, 18 items that asked respondents

to indicate both their level of knowledge about the characteristics of an existing performance assessment, the Maryland Writing Test, and their attitudes toward those specific characteristics. Thus, respondents provide 18 responses about their attitudes toward the characteristics of the Maryland Writing Test. The responses to survey items concerning the importance of each characteristic of the Maryland Test to its success in assessing statewide writing skills, provide data from which teachers' attitudes toward those characteristics were determined. Further, by summing their responses to survey items that asked for their opinions about the importance of each characteristic of the Maryland Writing Test to its success, teachers' overall attitudes toward the Maryland Writing Test were determined.

Additional Information for Survey Respondents

An information sheet (Appendix B) was included for optional use by survey respondents. It provided information about each characteristic of the Maryland Writing Test and was included with the survey as an attempt to ensure responses that were based on a reasonable understanding of each of the characteristics of the Maryland Writing Test.

Providing an information sheet about the characteristics of the Maryland Writing Test had the potential of contaminating teachers' self-reported amount of knowledge about it since they may have read the information sheet before responding to the items that asked for their prior knowledge about the test. However, it was believed that providing the information sheet to survey respondents increased the likelihood of obtaining informed opinions about the importance of the test's characteristics to its success as it attempts to assess statewide writing skills.

Determination of Sample Size

A power analysis was undertaken to determine the number of usable responses needed to relate attitudes to demographic characteristics. The findings from this research were intended to identify medium to small effects with .80 power within the population of 22,000 (approx.) teachers under study.

Using an anticipated 50 percent return rate, the total number of teachers to whom surveys were sent was determined as follows.

1. Small effects sample size as calculated above means that 1,100 usable surveys was required. Using a 50 percent return rate, to receive 1,100 usable surveys required a distribution of 2,200 surveys.

2. Medium effects sample size as calculated above means that 550 usable surveys was required. Using a 50 percent return rate, to receive 550 usable surveys required a distribution of 1,100 surveys.

Five hundred thirty-eight useable surveys were returned from the 1,220 surveys distributed. This is close to the 550 usable surveys required for a study of medium effects, but is less than the 1,100 usable surveys required for a study of small effects.

Population

The population of the study was teachers who teach English/language arts, mathematics, science, and social studies in Maryland's 176 public high schools. Those teachers were selected for study since the academic disciplines in which they teach correspond to four of the five academic areas in which new statewide assessments for high school students are currently under development in Maryland. The fifth area to be assessed is reading, and while some high school teachers hold state certification in reading, few, if any, in Maryland teach reading as a separate class.

The public school system in Maryland is comprised of 24 jurisdictions including Baltimore City and, as of September 30, 1989, it enrolled a total of 698, 806 students in grades K to12 of which 185,535 or 27 percent of the total enrollment are in grades 9 to 12.

Seven items on the survey used in this study asked respondents to provide the following demographic information.

1. the academic subject taught
2. the number of years taught
3. the school system in which they teach

4. the highest degree earned
5. their sex
6. their race
7. their happiness as teachers

Distribution and Return of Survey Instruments

The survey instruments were distributed, through a proportional random sampling procedure, to 1,220 teachers of English/language arts, mathematics, science, and social studies in the 24 public school systems in Maryland who currently teach in those academic disciplines for a majority of the school day. Surveys were returned from teachers in all twenty-four of the public school systems in Maryland.

Table 1 provides information about the distribution and return of the surveys used in this study. Surveys were distributed proportionately according to the percent of statewide teachers who teach students in grades seven to 12. Column two indicates the total number of teachers surveyed in each school system while column five indicates the percent of all teachers surveyed in the state for each school system. Column three indicates the number and column four shows the percent of surveys returned for each school system. Column six shows the percent of statewide surveys that were returned from each school system.

It is important to note from Table 1 the statewide distribution of surveys and return rates. Comparing columns five and six reveals that the percent of returned surveys from each school system closely approximates the percent of surveys distributed in each school system. Moreover, the range of return rates, as seen in column four of Table 1 extends from a low of 25.0 percent to a high of 83.3 percent. Ten school systems have return rates below the statewide average of 44.1, and 14 school systems have return rates above the statewide average. These data indicate that teachers who returned surveys for this study represent all 24 public school systems in approximately the same proportion as the total number of teachers who teach students in grades 7 to 12 in their school systems.

Table 1
Distribution and Return of Surveys by School System

School System	Number of Teachers Surveyed	Number of Surveys Returned	Percent of Surveys Returned	Percent of All Teachers Surveyed	Percent of All Surveys Returned
Allegany	20	11	55.0	1.6	2.0
Anne Arundel	104	60	57.7	8.7	11.2
Baltimore City	148	56	37.8	12.2	10.4
Baltimore Co.	168	71	42.3	14.1	13.2
Calvert	16	4	25.0	1.3	0.7
Caroline	12	8	75.0	1.0	1.5
Carroll	40	16	48.0	3.3	3.0
Cecil	24	16	66.7	2.0	3.0
Charles	28	12	42.9	2.4	2.2
Dorchester	12	5	41.7	1.0	0.9
Frederick	44	17	38.6	3.7	3.2
Garrett	12	7	58.3	1.0	1.3
Harford	52	23	53.9	4.4	4.3
Howard	56	25	44.6	4.5	4.7
Kent	12	5	41.7	1.0	0.9
Montgomery	172	75	43.6	14.1	13.9
Prince George's	176	60	34.1	14.4	11.2
Queen Anne's	12	6	50.0	1.0	1.1
Somerset	12	10	83.3	1.0	1.9
St. Mary's	24	18	75.0	1.9	3.3
Talbot	12	8	75.0	1.0	1.5
Washington	32	12	37.5	2.6	2.2
Wicomico	20	9	45.0	1.7	1.7
Worcester	12	4	33.3	1.0	0.7
Statewide Totals	1,220	538	44.1		

Selected Demographic Information About Survey Respondents

Although the sampling procedures used in this study identified an equal number of English/language arts, mathematics, science, and social studies teachers for participation, teachers in those areas did not return surveys in equal numbers. Mathematics, science, and

social studies teachers statewide participated in this study in relatively equal and almost identical numbers while English/language arts teachers participated in it at a rate that is over 30 percent higher than teachers in the other three academic disciplines. Perhaps this was because English/language arts is most directly related to the Maryland Writing Test.

Survey returns by English/language arts teachers represent 31.0 percent of all surveys returned, while those returned by mathematics teachers represent 23.6 percent of the total, science teachers represent 22.5 percent of the total, and social studies teachers represent 22.9 percent of the total.

Of the 538 surveys returned 294, or 54.7 percent, were returned by female teachers and 218, or 40.5 percent, were returned by male teachers. An additional 26 surveys, or 4.8 percent, were returned by teachers who declined to indicate their sex. Although this item was listed as optional on the survey, 95.2 percent of respondents chose to respond to it. The percent of female and male teachers who indicated their sex on the survey compares favorably with the percent of female and male high school teachers statewide which are 56.1 percent female teachers and 43.9 percent male teachers.

Caucasians represent 87.2 percent of the survey sample while Blacks represent 8.8 percent, Hispanics represent 1.0 percent, Asians and American Indians each represent 0.8 percent, 1.4 percent indicate their race as "Other," and 37 or 6.9 percent chose not to respond to the item. These percents, except for Black respondents, compare favorably to those of all high school teachers statewide which are 81.9 percent Caucasian, 16.6 percent Black, and 1.5 percent Other.

In response to an item on the survey used in this study, respondents indicated the number of years they have been a high school teacher. The range of teaching experience among respondents was from one to 39 years. Respondents were grouped in three-year intervals by the number of years they have been a high school teacher, with one group that included teachers who had taught 28 or more years. This last group has a number of years of teaching interval of 12 years.

The distribution of respondents by number of years they have been teachers is fairly even across the number of years teaching categories, with the exception of the number of teachers who have been teaching for 28 or more years. There are 30 survey respondents in this category. Two other categories have fewer teachers than the average of 48.9 teachers in them. Those categories are teachers with three or fewer years (42 respondents) and teachers with seven to nine years (46 respondents) of teaching experience. All other categories of numbers of years as a teacher are above the average of 48.9 respondents and are very similar or identical to each other.

The mean number of years as a teacher for all respondents was 15.3 years. There were 51.0 percent of survey respondents in the first half of a normal 30-year teaching career. Master's degrees are the highest degree earned for 388 or 72.1 percent of survey respondents while 141 or 26.2 percent have Bachelor's degrees, and nine or 1.7 percent have Doctor's degrees.

Determination of Attitude Scores of Respondents

Individual responses of each participant on the Likert-type of items on pages two and three of the survey received numerical scores according to the following.

Response	Numerical score
Totally-unimportant	1
Somewhat-unimportant	2
Important	3
Very-important	4
Absolutely-essential	5

The maximum score a respondent could receive for his or her responses to the importance of the characteristics items on the survey is 90 (18 items X 5 points = 90), and the minimum score could be 18 (18 items X 1 point = 18). The higher the score a

respondent received on the importance items of the survey, the more favorable an attitude he or she has about the characteristics of the Maryland Writing Test and toward the overall test.

Computation and Categorization of Survey Respondents' Total Overall Attitude Scores

A total score was computed for survey participants as a result of their responses to the 18 attitude Likert-type items on the survey. That score was "Total Overall Attitude." Scores are also reported by two groups: subject taught and number of years taught.

Total Overall Attitude Scores

A total overall attitude score for each respondent, was computed as follows.

1. For each of the 18 characteristics of the Maryland Writing Test, respondents could indicate whether the characteristic was "totally-unimportant" (one point), "unimportant" (two points),"important" (three points), "very-important" (four points), or "absolutely-essential" to the success of the Maryland Writing Test (five points).
2. The points registered on each of the 18 items were summed and became the "Total Overall Attitude" score for each respondent.
3. The range of total overall attitude scores is from 18 to 90.
4. Seventy-six out of 538 (14.1 percent) respondents failed to respond to one attitude item or more on the survey; therefore, they did not receive a total overall attitude score and are not included in the analysis of data pertaining to overall attitude about the Maryland Writing Test. Their responses, however, are part of the data concerning teachers' attitudes toward the individual characteristics of the Maryland Writing Test.

Total overall attitude scores were assigned categories of total overall attitude toward the Maryland Writing Test as follows:

Score Range	Total Overall Attitude Category
18 to 27	Totally-unimportant
28 to 37	Somewhat-unimportant
38 to 48	Less-than-important
49 to 59	Important
60 to 69	More-than-important
70 to 79	Very-important
80 to 90	Absolutely-essential

English/language arts, mathematics, science, and social studies teachers' total overall attitude toward the Maryland Writing Test indicate that 97.0 percent of them have a favorable attitude toward the test. This percent of teachers indicate their favorable attitudes toward the test as a result of total overall attitude scores that indicate the various features of the test are "important," "more-than-important," "very-important," or "absolutely-essential" to its success in assessing students' writing skills statewide.

Further analysis of teachers' total overall attitude scores toward the Maryland Writing Test, as presented in Table 2, provides information concerning the percent of teachers with scores in each of the seven attitude categories. In addition to 97 percent of Maryland high school English/language arts, mathematics, science, and social studies teachers indicating a favorable attitude toward the test based on their total overall attitude scores, Table 2 also shows that 45.9 percent of them have attitude scores in the "very-important" or "absolutely-essential" categories. Therefore, not only are a very high percentage of teachers' attitudes generally favorable toward the Maryland Writing Test, there is indication that their favorable attitudes are more than minimal and in fact are very strong.

Table 2
English/Language Arts, Mathematics, Science, and Social Studies Teachers' Attitudes Toward the Maryland Writing Test by Total Overall Attitude Category

Total Overall Attitude	Total Overall Attitude Score Range	Number of Teachers	Percent of Teachers	Cumulative Percent
Absolutely-essential	80 to 90	62	13.4	13.4
Very-important	70 to 79	150	32.5	45.9
More-than-important	60 to 69	135	29.2	75.1
Important	49 to 59	101	21.9	97.0
Less-than-important	38 to 48	10	2.2	99.2
Somewhat-unimportant	28 to 37	2	0.4	99.6
Totally-unimportant	18 to 27	2	0.4	100.0
Total		462	100.0	100.0

Missing - 76
n = 538

Analyses of the total overall attitude scores of survey respondents by subject taught were conducted. Table 3 presents the percent of total overall attitude scores for each group of teachers in each of the attitude categories. There are some differences in overall attitudes toward the Maryland Writing Test based on the subject taught.

Table 3 has in column one the total overall attitude categories. In columns two through nine the table has the percent and cumulative percent of survey respondents in each total overall attitude category, by academic area. From this information it can be seen that over 90.0 percent of all teacher respondents in each academic area have total overall attitude scores that are in the "important," "more-than-important," "very-important," or "absolutely-essential" total overall attitude categories. The lowest percentage is for social studies teachers who as a group has 92.5 percent of its respondents in those categories, and the highest is for English/language arts teachers who as a group has 100.0 percent of its respondents in those categories.

Table 3
Comparison of English/Language Arts, Mathematics, Science, and Social Studies Teachers' Attitudes Toward the Maryland Writing Test Based on Their Total Overall Attitude Scores

Total Overall Attitude Category	Percent of Teachers							
	English/ Language Arts		Mathematics		Science		Social Studies	
	%	Cum.%	%	Cum.%	%	Cum.%	%	Cum.%
Absolutely-essential	27.3	27.3	7.7	7.7	6.9	6.9	5.7	5.7
Very-important	36.7	64.0	37.5	45.2	22.5	29.4	31.1	36.8
More-than-important	23.3	87.3	28.8	74.0	42.2	71.6	25.5	62.3
Important	12.7	100.0	24.0	98.0	24.5	96.1	30.2	92.5
Less-than-important	0.0	100.0	1.0	99.0	3.9	100.0	4.7	97.2
Somewhat-unimportant	0.0	100.0	1.0	100.0	0.0	100.0	0.9	98.1
Totally-unimportant	0.0	100.0	0.0	100.0	0.0	100.0	1.9	100.0
n =	150		104		102		106	

Total n = 462

Note.
Cum % = Cumulative percent.

Chi-square procedures were used to compare the total overall attitude scores with the subject taught by survey respondents. From the chi-square test, the chi-square was 72.53476, with 18 degrees of freedom, PL <.0001 (chi-square critical (.05,18)=28.8693). It was concluded that subject taught and attitude scores are related.

Further analysis was conducted using analysis of variance (ANOVA) with post hoc Scheffé tests (at the .05 level). Results of those procedures are presented in Table 4. Pairs that were found significantly different by the Scheffé procedure were:

English teachers' scores were greater than mathematics teachers' scores.

English teachers' scores were greater than science teachers' scores.

English teachers' scores were greater than social studies teachers' scores.

However, the attitude scores for teachers of mathematics, science, and social studies do not differ significantly from each other at the .05 level.

Table 4
Analysis of Variance of Total Overall Attitude Scores by Subject Taught

Source	df	SS	MS	F	p value
Subject taught	3	5937.66	1979.22	18.95	<.0001
Residual	458	47838.12	104.45		
Total	461	53775.78			

$F(3,6) = 4.6$, $p < .05$.

Subject	Count	Mean	Standard Deviation
English	150	72.37	9.56
Mathematics	104	66.31	10.14
Science	102	64.85	9.34
Social Studies	106	63.70	11.88

Table 5 presents information about each of the 18 characteristics of the Maryland Writing Test and the percents of survey respondents, by academic subject taught, with favorable attitudes toward them. A higher percentage of English/language arts teachers have favorable attitudes toward 11 characteristics of the Maryland Writing Test than mathematics, science, and social studies teachers; however, toward seven characteristics, a higher percentage of teachers other than English/language arts teachers have more favorable attitudes. Science teachers have the highest percentage of teachers with favorable attitudes toward four characteristics, mathematics teachers, two characteristics, and social studies teachers, one characteristic.

The characteristics with the most difference among the percents of teachers with favorable attitudes toward them are characteristic number four, "Scoring scale has four

score points" (47.8 percent social studies and 70.6 percent English/language arts teachers favorable toward it), number eight, "Raters are not Maryland teachers" (44.0 percent social studies and 63.2 percent English/language arts teachers favorable toward it) and characteristic number 13, "Test is administered in two sessions" (67.8 percent science and 90.2 percent English language arts teachers favorable toward it). The characteristic with the least difference among the percents of teachers with favorable attitudes toward it is characteristic number nine, "Students know score criteria before test" (95.8 percent of social studies and 99.4 percent of English/language arts teachers favorable toward it). For all other characteristics, the difference in percent of teachers with favorable attitudes toward them is between the ranges described above, and in all cases those differences are less than 20 percent.

Table 5
Percent of Survey Respondents with Favorable Attitudes Toward the Characteristics of the Maryland Writing Test by Subject Taught

Characteristics	Percent of Respondents with Favorable Attitudes by Subject Taught			
	English/ Language Arts	Mathematics	Science	Social Studies
1. Same prompts used for all students	92.8	88.5	95.0	88.2
2. Total scores are based on two prompts	95.9	93.6	94.0	88.1
3. Modified holistic scoring is used	84.8	80.9	85.5	75.2
4. Score scale has four score points	70.6	61.7	55.3	47.8
5. Score scale developed and maintained by Maryland teachers	82.2	80.7	81.2	75.4
6. Two raters independently score essays	98.8	96.0	95.0	94.0
7. Scoring is by trained raters	98.8	96.0	97.4	94.9
8. Raters are not Maryland teachers	63.2	52.0	49.6	44.0
9. Students know score criteria before test	99.4	98.4	98.3	95.8
10. During test students have scoring criteria	96.4	87.9	88.8	84.0
11. Score criteria for test are consistent over time	98.2	98.4	99.2	95.7
12. Students must pass test to graduate	82.1	96.0	92.4	78.8
13. Test is administered in two sessions	90.2	73.8	67.8	73.0
14. Students have unlimited time for test	92.0	88.8	87.1	84.5
15. Test first given in ninth grade	71.0	66.9	74.8	75.0
16. Students have multiple opportunities to pass test	96.4	92.8	96.6	92.4
17. Test is most often administered by students' teachers	68.7	68.8	57.6	64.4
18. Appeal and review is available for seniors	91.5	88.0	90.4	86.3

Note.
Percent with favorable attitudes is the sum of the percents in the three highest attitude categories available to survey respondents on the survey instrument: important, very-important and absolutely-essential to the success of the Maryland Writing Test.

Chi-square tests were conducted to compare English/language arts, mathematics, science, and social studies teachers' attitudes toward each of the 18 characteristics of the Maryland Writing Test. Table 6 shows the chi-square, degrees of freedom, and p-value for each characteristic. All but two of the 18 characteristics had a p-value of less than .05.

Thus, English/language arts, mathematics, science, and social studies teachers' attitudes toward 16 of the characteristics of the Maryland Writing Test, and the subject they teach are judged related, while their attitudes toward two characteristics and the subject they teach are not.

Table 6
Chi-square Table for the Attitudes Toward the Characteristics of the Maryland Writing Test and the Subject Taught by Survey Respondents

Characteristics	n=	df	Chi-Square	Significance
1. Same prompts used for all students	527	12	40.43252	.00006
2. Total scores are based on two prompts	525	12	49.92745	<.00001
3. Modified holistic scoring is used	502	12	55.53498	<.00001
4. Score scale has four score points	512	12	31.87551	.00145
5. Score scale developed and maintained by Maryland teachers	518	12	11.66133	.47325
6. Two raters independently score essays	525	12	48.31149	<.00001
7. Scoring is by trained raters	527	12	23.79221	.02171
8. Raters are not Maryland teachers	521	12	31.37282	.00173
9. Students know score criteria before test	529	12	47.73045	<.00001
10. During test students have scoring criteria	523	12	37.79757	.00017
11. Score criteria for test are consistent over time	524	12	37.68906	.00017
12. Students must pass test to graduate	524	12	29.62856	.00318
13. Test is administered in two sessions	515	12	90.37297	<.00001
14. Students have unlimited time for test	520	12	39.03909	.00010
15. Test first given in ninth grade	517	12	16.38478	.17424
16. Students have multiple opportunities to pass test	526	12	36.64583	.00025
17. Test is most often administered by students' teachers	521	12	25.94101	.01094
18. Appeal and review is available for seniors	521	12	37.48286	.00019

Note.
Chi-square, critical (.05,12) = 21.0261

Table 7 shows the percent of teachers in each total overall attitude category and number-of-years-taught category. Column one contains the number-of-years-taught categories; column two contains the number of respondents in each of those categories; and, columns three through nine contain the percent of respondents in each of the total overall attitude score categories. As shown in columns three, four, and five of the table, a very small percentage of respondents have total overall attitude scores in the categories

"totally-unimportant", "somewhat-unimportant," and "less-than-important." These percents taken together mean that 14 teachers have total overall attitude scores that are in categories considered in this research to be unfavorable toward the Maryland Writing Test. This also means that 97 percent of survey respondents have total overall attitude scores that are in categories considered as favorable toward the Maryland Writing Test.

Moreover, the combined percent of respondents with total overall attitude scores in the two most favorable total overall attitude categories ("very-important" and "absolutely-essential") is between 38.9 percent and 54.4 percent of respondents in all number-of-years-taught categories. This suggests that comparable total overall attitudes toward the Maryland Writing Test exist across the 10 number-of-years-taught categories.

Table 7
Survey Respondents' Total Overall Attitude Toward the Maryland Writing Test Based on the Number of Years They Have Taught

Number of Years Taught	n=	Percent of Survey Respondents in Each Total Overall Attitude Category						
		Unimportant			Important			
		Totally	Somewhat	Less Than	Impt.	More Than	Very	Absolutely Essential
3 or fewer	36	0.0	0.0	2.8	30.6	22.2	33.3	11.1
4 to 6	53	0.0	0.0	0.0	18.9	30.2	39.6	11.3
7 to 9	33	0.0	0.0	0.0	24.2	36.4	30.3	9.1
10 to 12	56	0.0	1.8	5.4	23.2	28.6	25.0	16.1
13 to 15	57	0.0	0.0	0.0	12.3	33.3	33.3	21.1
16 to 18	58	1.7	0.0	1.7	22.4	22.4	37.9	13.8
19 to 21	54	0.0	0.0	7.4	18.5	35.2	25.9	13.0
22 to 24	49	0.0	0.0	0.0	32.7	24.5	28.6	14.3
25 to 27	43	2.3	0.0	0.0	20.9	30.2	37.2	9.3
28 or more	23	0.0	4.3	4.3	17.4	30.4	34.8	8.7
Total =	462							

Table 8 shows in another way the distribution of total overall attitude scores for each number-of-years-taught category, along with the total overall attitude category that corresponds to those scores. Of the 10 number-of-years-taught categories, nine have mean total overall attitude scores that are in the "more-than-important" category of total overall attitude, while the other number-of-years-taught category has a mean total overall attitude score in the "very-important" category of total overall attitude. These data give further an indication that there is little, if any, difference in the attitudes survey respondents have toward the Maryland Writing Test based on the number of years taught.

Table 8
Survey Respondents' Mean Total Overall Attitudes Scores Toward the Maryland Writing Test Based on the Number of Years They Have Taught

Number of Years Taught	n=	Mean Total Attitude Score	Total Overall Attitude Category
3 or fewer years	36	66.8	More-than-important
4 to 6 years	53	68.7	More-than-important
7 to 9 years	33	67.2	More-than-important
10 to 12 years	56	66.2	More-than-important
13 to 15 years	57	70.6	Very-important
16 to 18 years	58	67.2	More-than-important
19 to 21 years	54	66.2	More-than-important
22 to 24 years	49	66.8	More-than-important
25 to 27 years	43	66.7	More-than-important
28 or more years	23	65.4	More-than-important

Total n = 462

Chi-square procedures were conducted to compare total overall attitude scores with the number of years taught, and to determine whether or not respondents' attitudes and number of years they have taught are independent. In this case the chi-square with 54 degrees of freedom is 53.53864, and the p-value is .49213; thus, total overall knowledge scores and the number of years taught are not judged dependent (chi-square critical (.05,54) = 76.982).

Table 9 shows the percent of survey respondents with favorable attitudes toward the characteristics of the Maryland Writing Test by the number of years they have taught. The characteristics showing relatively little difference in the percents of teachers with favorable attitudes toward them were reported among teachers who have taught for different number of years were characteristics number 11, "Score criteria for test are consistent over time" (the range was from a low of 96.1 percent to a high of 100 percent) and number nine, "Students know score criteria before test" (the range was from a low of 94.1 percent to a high of 100.0 percent).

The characteristics showing the most difference, among the years taught categories, in the percent of teachers with favorable attitudes toward them was characteristic number five, "Score scale developed and maintained by Maryland teachers," (the range was from a low of 69.2 percent to a high of 90.0 percent for a 30.8 percent difference). All other differences in the percents of teachers with favorable attitudes among the number-of-years-taught categories are less than 20 percent. The characteristic of the Maryland Writing Test about which the lowest percentage of respondents in all number-of-years-taught categories reported favorable attitudes was characteristic number 8, "Raters are not Maryland teachers" (the range was from the low of 47.7 percent to the high of 63.3 percent).

Table 9
Percent of Survey Respondents with Favorable Attitudes Toward the Characteristics of the Maryland Writing Test by the Number of Years They Have Taught

Characteristics	Percent of Respondents with Favorable Attitudes By Number of Years Taught									
	3 or Fewer	4 to 6	7 to 9	10 to 12	13 to 15	16 to 18	19 to 21	22 to 24	25 to 27	28 or More
1. Same prompts used for all students	85.7	91.2	86.4	95.2	95.3	91.9	85.2	94.7	92.0	96.3
2. Total scores are based on two prompts	97.5	100.0	91.1	93.7	95.2	87.1	86.4	94.8	92.2	96.3
3. Modified holistic scoring is used	89.5	89.3	82.9	82.0	90.2	86.7	70.2	77.8	68.8	80.8
4. Score scale has four score points	69.0	73.7	58.1	62.3	72.1	55.7	50.1	55.4	59.2	64.0
5. Score scale developed and maintained by Maryland teachers	90.0	82.8	75.0	77.4	85.2	75.8	78.3	83.6	80.0	69.2
6. Two raters independently score essays	100.0	96.6	93.3	95.1	95.2	95.2	96.7	96.6	98.0	96.3
7. Scoring is by trained raters	97.6	100.0	93.3	98.4	98.4	96.8	95.1	94.8	98.0	96.2
8. Raters are not Maryland teachers	53.7	56.9	47.7	58.1	50.8	51.6	47.5	49.1	63.3	53.8
9. Students know score criteria before test	100.0	98.3	97.8	98.4	100.0	96.8	96.7	100.0	94.1	100.0
10. During test students have scoring criteria	87.5	93.1	93.2	84.6	91.8	88.7	83.3	93.1	92.2	88.9
11. Score criteria for test are consistent over time	97.6	100.0	97.7	98.4	100.0	96.8	96.7	96.6	96.1	100.0
12. Students must pass test to graduate	87.8	91.4	87.7	88.7	80.0	88.5	86.9	86.2	74.5	74.1
13. Test is administered in two sessions	80.0	75.9	75.0	85.5	78.3	82.0	72.9	70.9	73.5	81.5

(table continues)

Table 9
Percent of Survey Respondents with Favorable Attitudes Toward the Characteristics of the Maryland Writing Test by the Number of Years They Have Taught (continued)

Characteristics	Percent of Respondents with Favorable Attitudes By Number of Years Taught									
	3 or Fewer	4 to 6	7 to 9	10 to 12	13 to 15	16 to 18	19 to 21	22 to 24	25 to 27	28 or More
14. Students have unlimited time for test	92.7	91.4	88.9	92.1	91.7	91.8	84.7	82.5	83.7	81.5
15. Test first given in ninth grade	65.0	78.9	61.9	74.6	71.7	73.8	68.9	73.7	71.4	74.1
16. Students have multiple opportunities to pass test	92.7	100.0	100.0	95.2	96.7	93.5	95.1	89.7	92.2	88.9
17. Test is most often administered by students' teachers	61.0	75.4	62.2	66.1	65.6	70.0	59.0	58.6	53.1	74.1
18. Appeal and review is available for seniors	87.5	89.5	90.1	83.9	90.2	87.1	95.0	82.5	88.2	85.2

Note.
Percent with favorable attitudes is the sum of the percents in the three highest attitude categories available to survey respondents on the survey instrument: important, very-important, and absolutely-essential to the success of the Maryland Writing Test.

To determine whether or not attitudes toward the characteristics of the Maryland Writing Test and the number of years survey respondents had taught were independent, chi-square procedures were used. Table 10 shows the characteristics, number of respondents, chi-square, degrees of freedom, and significance for each characteristic. The chi-square critical (.05,36) = 50.9643, and when compared to the chi-square observed for each characteristic in Table 32, shows that 15 of the characteristics have chi-square that do not exceed chi-square critical; therefore, the attitudes respondents have toward them are not judged related to the number of years they have taught. For three characteristics, however, their chi-square values exceed chi-square critical; thus, respondents' attitudes toward them and the number of years they have taught are judged related.

Analysis of variance (ANOVA) and post hoc Scheffé (at .05) procedures were conducted in an attempt to determine which number-of-years-taught categories differed significantly on those three characteristics. Those procedures produced results that indicate no statistically significant differences exist among the number-of-years-taught categories. The critical value of F for this one way analysis of variance, with nine and four degrees of freedom at .05, is 6.0 and the F for the ANOVAs for characteristic number two was 2.110, for characteristic number seven, it was 1.8869, and for characteristic number 13 it was .6426.

Table 10
Chi-square Table for the Attitudes Toward the Characteristics of the Maryland Writing Test by the Number of Years Taught by Survey Respondents

Characteristics	n =	df	Chi-Square	Significance
1. Same prompts used for all students	527	36	46.89494	.10560
2. Total scores are based on two prompts	525	36	54.85099	.02291
3. Modified holistic scoring is used	502	36	41.04286	.25900
4. Score scale has four score points	512	36	44.89961	.14680
5. Score scale developed and maintained by Maryland teachers	518	36	29.42278	.77282
6. Two raters independently score essays	525	36	31.32241	.69061
7. Scoring is by trained raters	527	36	54.87715	.02278
8. Raters are not Maryland teachers	521	36	43.60503	.17948
9. Students know score criteria before test	529	36	35.09509	.51145
10. During test students have scoring criteria	523	36	32.34461	.64317
11. Score criteria for test are consistent over time	524	36	23.33092	.94897
12. Students must pass test to graduate	524	36	47.54345	.09441
13. Test is administered in two sessions	515	36	24.43582	.92830
14. Students have unlimited time for test	520	36	52.69420	.03578
15. Test first given in ninth grade	517	36	29.34896	.77582
16.Students have multiple opportunities to pass test	526	36	47.76849	.09076
17.Test is most often administered by students' teachers	521	36	31.49609	.68267
18. Appeal and review is available for seniors	521	36	45.28449	.13802

Note.
Chi-square, critical (.05,36) = 50.9643

Percents and Rank-Orders of Survey Respondents' Attitudes Toward the Characteristics of the Maryland Writing Test

The following section presents information about the percent of survey respondents with favorable attitudes toward each characteristic of the Maryland Writing Test and the rank order of the characteristics based on those percents. The characteristic with the highest percentage of survey respondents who indicate it is "important," "very-important,"

or "absolutely-essential" to the success of the Maryland Writing Test as it attempts to measure statewide writing skills, is ranked number one and the characteristic with the lowest percentage of survey respondents who give the same indication about the characteristic is ranked number 18. All other characteristics are ranked between numbers 1 and 18 in descending order of the percent of survey respondents that say the characteristics are "important," "very-important," or "absolutely-essential" to the Maryland Writing Test.

Percents and Rank Orders by Subject Taught

The percent of English/language arts, mathematics, science, and social studies teachers with favorable attitudes toward each characteristic, as defined above, are reported in Table 11, along with the rank order of the characteristics, based on those percents. Column one contains the characteristics of the Maryland Writing Test, and it should be noted they are numbered using the chronological number assigned to them, which number they have maintained throughout this research. Column two shows the rank each characteristic has based on the percent of English/language arts, mathematics, science, and social studies teachers with favorable attitudes toward them, and column three shows the percent of respondents with favorable attitudes toward each characteristic.

Eight of the 18 characteristics are viewed favorably by 90 percent or more of all survey respondents; six characteristics are viewed favorably by 80 percent to 89 percent of all survey respondents; two characteristics are viewed favorably by 70 percent to 79 percent; one characteristic is viewed favorably by 60 percent to 69 percent of all survey respondents; and one characteristic is viewed favorably by 50 percent to 59 percent of all survey respondents. Thus, all of the characteristics are viewed favorably by at least more than half of all survey respondents, and 83.3 percent (15 of 18 characteristics) of them are viewed favorably by 75 percent or more of all survey respondents.

The characteristic with the highest percentage of teachers who view it favorably is characteristic number nine, "Students know score criteria before test." The

characteristic with the lowest percentage of teachers that view it favorably is characteristic number eight, "Raters are not Maryland Teachers."

Table 11
Rank Order of the Characteristics of the Maryland Writing Test by the Percent of All Survey Respondents with Favorable Attitudes Toward Them

Characteristics	Rank	Percent of All Survey Respondents With Favorable Attitudes
9. Students know score criteria before test	1	98.1
11. Score criteria for test are consistent over time	2	97.9
7. Scoring is by trained raters	3	96.9
6. Two raters independently score essays	4	96.1
16. Students have multiple opportunities to pass test	5	94.8
2. Total scores are based on two prompts	6	93.1
1. Same prompts used for all students	7	91.4
10. During test students have scoring criteria	8	90.0
14. Students have unlimited time for test	9	88.5
18. Appeal and review is available for seniors	10	88.2
12. Students must pass test to graduate	11	87.0
3. Modified holistic scoring is used	12	87.0
5. Score scale developed and maintained by Maryland teachers	13	81.8
13. Test is administered in two sessions	14	80.2
15. Test first given in ninth grade	15	77.5
17. Test is most often administered by students' teachers	16	71.8
4. Score scale has four score points	17	61.9
8. Raters are not Maryland teachers	18	53.2

Note.
Percent with favorable attitudes is the sum of the percents of survey respondents who indicated the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing Test.

Table 12 again shows the overall rank order of the characteristics of the Maryland Writing Test as determined by English/language arts, mathematics, science, and social studies teachers who participated in this research. Columns three, four, five, and six show the rank of each characteristic by the percent of teachers with favorable attitudes toward the

characteristic, for English/language arts, mathematics, science, and social studies teachers, respectively.

Characteristic number 12, "Students must pass test to graduate," shows the greatest disagreement among teachers of different academic subjects in terms of where it is ranked among the 18 characteristics. English/language arts teachers rank that characteristic number 4 while teachers in the other academic subjects rank it as follows: mathematics teachers five, science teachers 9, and social studies teachers rank it number 11. The characteristic about which the next highest amount of disagreement occurs among teachers in the four academic areas occurs with characteristic number 13, "Test is administered in two sessions." Here, English language/arts teachers rank the characteristic number 11 of the 18 characteristics while mathematics teachers rank it number 14, and science and social studies teachers rank it number 15.

All of the other characteristics are ranked within four or fewer ranks of each other across the four academic areas: thus, in terms of ranking the characteristics by the percent

Table 12
Comparison of the Rank Order of the Characteristics of the Maryland Writing Test Based on the Percent of Survey Respondents with Favorable Attitudes Toward Them

Characteristics	Overall Rank	English/ Language Arts Rank	Mathematics Rank	Science Rank	Social Studies Rank
9. Students know score criteria before test	1	1	1	2	1
11. Score criteria for test are consistent over time	2	4	2	1	2
7. Scoring is by trained raters	3	3	3	7	3
6. Two raters independently score essays	4	2	3	5	4
16. Students have multiple opportunities to pass test	5	5	7	4	5
2. Total scores are based on two prompts	6	7	6	7	7
1. Same prompts used for all students	7	8	9	5	6
10. During test students have scoring criteria	8	5	11	8	9
14. Students have unlimited time for test	9	9	8	11	10
18. Appeal and review is available seniors	10	10	10	10	8
12. Students must pass test to graduate	11	14	5	9	11
3. Modified holistic scoring is used	12	12	12	12	13
5. Score scale developed and maintained by Maryland teachers	13	13	13	13	12
13. Test is administered in two sessions	14	11	14	15	15
15. Test first given in ninth grade	15	15	16	14	14
17. Test is most often administered by students' teachers	16	17	15	16	16
4. Score scale has four score points	17	16	17	17	17
8. Raters are not Maryland teachers	18	18	18	18	18

Note.
Percent with favorable attitudes is the sum of the percents of survey respondents who indicated the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing Test.

of teachers with favorable attitudes toward them, there is a high degree of agreement among survey respondents in this regard.

The next four tables present the characteristics of the Maryland Writing Test in rank order for each academic area. Each table provides, in addition, the percent of teacher respondents with favorable attitudes toward the characteristics.

For each of the tables, column one contains the characteristics of the Maryland Writing Test. Column two shows the rank each characteristic has based on the percent of English/language arts, mathematics, science, or social studies teachers with favorable attitudes toward them, and column three shows the percent of respondents who teach in that academic area with favorable attitudes toward each characteristic.

Table 13 presents the above information about teachers of English/language arts. Over 90 percent of English/language arts teachers have favorable attitudes toward 11 characteristics, over 80 percent have favorable attitudes toward 14 characteristics, over 70 percent have favorable attitudes toward 16 characteristics, and over 60 percent have favorable attitudes toward all 18 characteristics.

The characteristics English/language arts teachers rank lowest, as far as their attitudes toward them are concerned, are characteristics number eight, "Raters are not Maryland Teachers," and number 17, "Test most often administered by students' teachers." The characteristic English/language arts teachers rank highest is number nine, "Students know score criteria before test."

Table 13
Rank Order of The Characteristics of the Maryland Writing Test by the Percent of High School English/Language Arts Teachers with Favorable Attitudes Toward Them

Characteristics	Rank	Percent of English/ Language Arts Teachers With Favorable Attitudes
9. Students know score criteria before test	1	99.4
6. Two raters independently score essays	2	98.8
7. Scoring is by trained raters	2	98.8
11. Score criteria for test are consistent over time	4	98.2
10. During test students have scoring criteria	5	96.4
16. Students have multiple opportunities to pass test	5	96.4
2. Total scores are based on two prompts	7	95.8
1. Same prompts used for all students	8	92.8
14. Students have unlimited time for test	9	92.0
18. Appeal and review is available for seniors	10	91.5
13. Test is administered in two sessions	11	90.2
3. Modified holistic scoring is used	12	84.8
5. Score scale developed and maintained by Maryland teachers	13	82.2
12. Students must pass to graduate	14	82.1
15. Test first given in ninth grade	15	71.0
4. Score scale has four score points	16	70.6
17. Test is most often administered by students' teachers	17	68.7
8. Raters are not Maryland teachers	18	63.2

Notes.
1. Percent with favorable attitudes is the sum of the percents of English/Language Arts teacher survey respondents who indicated the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing Test.
2. Characteristics with the same rank have identical percents of teachers with favorable attitudes toward the characteristic.

Table 14 presents the above information about teachers of mathematics. Over 90 percent of mathematics teachers have favorable attitudes toward seven characteristics, over 80 percent have favorable attitudes toward 13 characteristics, over 70 percent have favorable attitudes toward 14 characteristics, over 60 percent have favorable attitudes toward 17 characteristics, and over 50 percent have favorable attitudes toward all eighteen characteristics.

The characteristics mathematics teachers rank lowest, as far as their attitudes toward them are concerned, are characteristics number eight, "Raters are not Maryland teachers", and number four, "Score scale has four score points." The characteristic mathematics teachers rank highest is number nine, "Students know score criteria before test."

Table 14
Rank Order of The Characteristics of the Maryland Writing Test by the Percent of High School Mathematics Teachers with Favorable Attitudes Toward Them

Characteristics	Rank	Percent of Mathematics Teachers with Favorable Attitudes
9. Students know score criteria before test	1	98.4
11. Score criteria for test are consistent over time	2	98.3
6. Two raters independently score essays	3	96.0
7. Scoring is by trained raters	3	96.0
12. Students must pass to graduate	5	96.0
2. Total scores are based on two prompts	6	93.5
16. Students have multiple opportunities to pass test	7	92.8
14. Students have unlimited time for test	8	88.8
1. Same prompts used for all students	9	88.5
18. Appeal and review is available for seniors	10	88.0
10. During test students have scoring criteria	11	87.9
3. Modified holistic scoring is used	12	80.8
5. Score scale developed and maintained by Maryland teachers	13	80.7
13. Test is administered in two sessions	14	73.8
17. Test is most often administered by students' teachers	15	68.8
15. Test first given in ninth grade	16	66.9
4. Score scale has four score points	17	61.7
8. Raters are not Maryland teachers	18	52.0

Notes.
1. Percent with favorable attitudes is the sum of the percents of mathematics teacher survey respondents who indicated the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing Test.
2. Characteristics with the same rank have identical percents of teachers with favorable attitudes toward the characteristic.

Table 15 presents the above information about teachers of science. Over 90 percent of science teachers have favorable attitudes toward nine characteristics, over 80 percent have favorable attitudes toward 13 characteristics, over 70 percent have favorable attitudes toward 14 characteristics, over 60 percent have favorable attitudes toward 15

characteristics, over 50 percent have favorable attitudes toward 17 characteristics, and over 40 percent have favorable attitudes toward all 18 characteristics.

The characteristics science teachers rank lowest, as far as their attitudes toward them are concerned, are characteristics number four, "Score scale has four score points," number eight, "Raters are not Maryland teachers," and number seventeen, "Test most often administered by students' teachers." The characteristic science teachers rank highest is number 11, "Score criteria for test are consistent over time."

Table 15
Rank Order of the Characteristics of the Maryland Writing Test by the Percent of High School Science Teachers with Favorable Attitudes Toward Them

Characteristics	Rank	Percent of Science Teachers with Favorable Attitudes
11. Score criteria for test are consistent over time	1	99.2
9. Students know score criteria before test	2	98.3
7. Scoring is by trained raters	3	97.4
16. Students have multiple opportunities to pass test	4	96.6
1. Same prompts used for all students	5	95.0
6. Two raters independently score essays	5	95.0
2. Total scores are based on two prompts	7	94.0
10. During test students have scoring criteria	8	92.4
12. Students must pass test to graduate	9	90.4
18. Appeal and review is available for seniors	10	88.8
14. Students have unlimited time for test	11	87.1
3. Modified holistic scoring is used	12	85.5
5. Score scale developed and maintained by Maryland teachers	13	81.2
15. Test first given in ninth grade	14	74.8
13. Test is administered in two sessions	15	67.8
17. Test is most often administered by students' teachers	16	57.6
4. Score scale has four score points	17	55.3
8. Raters are not Maryland teachers	18	49.6

Notes.
1. Percent with favorable attitudes is the sum of the percents of science teacher survey respondents who indicated the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing Test.
2. Characteristics with the same rank have identical percents of teachers with favorable attitudes toward the characteristic.

Table 16 presents the above information about teachers of social studies. Over 90 percent of social studies teachers have favorable attitudes toward five characteristics, over 80 percent have favorable attitudes toward 10 characteristics, over 70 percent have favorable attitudes toward 15 characteristics, over 60 percent have favorable attitudes toward 16 characteristics, and over 40 percent have favorable attitudes toward all 18 characteristics.

The characteristics social studies teachers rank lowest, as far as their attitudes toward them are concerned, are characteristics number four, "Score scale has four scored points," number eight, "Raters are not Maryland teachers," and number seventeen, "Test most often administered by students' teachers." The characteristic social studies teacher rank highest is number nine, "Students know score criteria before test."

Table 16
Rank Order of the Characteristics of the Maryland Writing Test by the Percent of High School Social Studies Teachers with Favorable Attitudes Toward Them

Characteristics	Rank	Percent of Social Studies Teachers with Favorable Attitudes
9. Students know score criteria before test	1	95.8
11. Score criteria for test are consistent over time	2	95.7
7. Scoring is by trained raters	3	94.9
6. Two raters independently score essays	4	94.0
16. Students have multiple opportunities to pass test	5	92.4
1. Same prompts used for all students	6	88.2
2. Total scores are based on two prompts	7	88.1
18. Appeal and review is available for seniors	8	86.3
10. During test students have scoring criteria	9	84.8
14. Students have unlimited time for test	10	84.5
12. Students must pass test to graduate	11	78.8
5. Score scale developed and maintained by Maryland teachers	12	75.4
3. Modified holistic scoring is used	13	75.2
15. Test first given in ninth grade	14	75.0
13. Test is administered in two sessions	15	73.0
17. Test is most often administered by students' teachers	16	64.4
4. Score scale has four score points	17	47.8
8. Raters are not Maryland teachers	18	44.0

Note.
Percent with favorable attitude is the sum of the percents of social studies teacher survey respondents that indicated the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing Test.

Percents and Rank Orders by the Number of Years Taught

Table 17 shows the rank of each characteristic of the Maryland Writing Test as determined by the percent of teachers in each number-of-years-taught category with favorable attitudes toward the characteristics. The characteristic with the largest percentage of survey respondents with favorable attitudes toward it is ranked number one and the characteristic with the smallest percent of survey respondents with favorable attitudes toward it is ranked number eighteen. All other characteristics are ranked between numbers 1 and 18 according to the percent of survey respondents with favorable attitudes toward them.

The range of ranks for each characteristic for the number-of-years-taught categories are very similar across those categories, although some variation can be seen in characteristics number one, "Same prompts used for all students (range of ranks from three to 12)," number two, "Total scores are based on two prompts (range of ranks from one to 10)," and number 12, "Students must pass to graduate (range of ranks from four to 13)." Other than those noted above, the ranges for all other characteristics are seven ranks or fewer and four characteristics have ranges that are three ranks or fewer.

Table 17
Rank Order of the Characteristics of the Maryland Writing Test by the Percent of Teachers Who Have Favorable Attitudes Toward Them by the Number of Years They Have Taught

Characteristics	Rank of Characteristics by Number of Years Taught									
	3 or Fewer	4 to 6	7 to 9	10 to 12	13 to 15	16 to 18	19 to 21	22 to 24	25 to 27	28 or More
1. Same prompts used for all students	12	10	11	4	5	6	9	6	9	3
2. Total scores are based on two prompts	5	1	7	7	6	10	8	4	6	3
3. Modified holistic scoring is used	9	12	12	13	10	12	14	13	15	9
4. Score scale has four score points	15	17	17	17	16	17	17	17	17	18
5. Score scale developed and maintained by Maryland teachers	8	13	13	14	12	14	12	10	12	15
6. Two raters independently score essays	1	6	4	5	6	4	1	2	2	3
7. Scoring is by trained raters	3	1	4	1	3	1	4	4	1	3
8. Raters are not Maryland teachers	18	18	18	18	18	18	18	18	16	17
9. Students know score criteria before test	1	5	2	1	1	1	1	2	3	1
10. During test students have scoring criteria	13	7	6	9	8	8	11	7	6	7

(table continues)

Table17
Rank Order of the Characteristics of the Maryland Writing Test by the Percent of Teachers Who Have Favorable Attitudes Toward Them by the Number of Years They Have Taught (continued)

Characteristics	Rank of Characteristics by Number of Years Taught									
	3 or Fewer	4 to 6	7 to 9	10 to 12	13 to 15	16 to 18	19 to 21	22 to 24	25 to 27	28 or More
11. Score criteria for test are consistent over time	4	1	3	3	1	1	1	2	3	1
12. Students must pass test to graduate	10	8	10	9	13	9	7	9	4	16
13. Test is administered in two sessions	14	15	13	11	14	13	13	15	13	10
14. Students have unlimited time for test	6	9	9	8	9	7	10	11	10	10
15. Test first given in ninth grade	16	14	16	15	15	15	15	14	14	13
16. Students have multiple opportunities to pass test	6	1	1	5	4	5	4	8	6	8
17. Test is most often administered by students' teachers	17	16	15	16	17	16	16	16	18	13
18. Appeal and review is available for seniors	11	11	8	12	10	10	6	11	11	10

Notes.
1. Duplicate ranks occur in some categories of number of years taught and indicate identical importance scores for those characteristics with the same rank.
2. Ranks were determined by the percent of respondents in each years taught category who said the characteristic was important, very-important, or absolutely-essential to the success of the Maryland Writing test. A rank of 1 means the characteristic had the highest percentage of respondents; a rank of 18 means the characteristic had the lowest percentage of respondents.

Conclusions Concerning Maryland High School Teachers' Attitudes Toward the Maryland Writing Test

Overall Attitudes Toward the Maryland Writing Test

From the above findings, it can be concluded that in the aggregate high school English/language arts, mathematics, science, and social studies teachers in Maryland, have favorable attitudes toward the Maryland Writing Test since 97.0 percent of them have favorable total overall attitude scores on the survey instrument used in it.

While overall, the group as a whole has a favorable attitude, there are significant differences in the attitudes teachers of English/language arts, mathematics, science, and social studies have toward the Maryland Writing Test. As a group, English/language arts teachers have a higher percentage of teachers with "more-than-important" attitudes toward the test than do those in groups of mathematics, science, and social studies teachers. Although those differences are relatively small, there are statistically significant different attitudes between English/language arts teachers and mathematics teachers, between English/language arts teachers and science teachers, and between English/language arts teachers and social studies teachers. It is concluded that English/language arts teachers have more favorable attitudes toward the Maryland Writing Test than teachers in each of the other three academic areas but that no immediate or greater differences in attitudes toward it exist among teachers in the other three academic areas.

We also conclude that no moderate or strong differences is e.ist in the total overall attitude scores teachers have toward the Maryland Writing Test based on the number of years they have taught.

Attitudes Toward the Characteristics of the Maryland Writing Test

From the findings above, we also conclude that Maryland high school English, mathematics, science, and social studies teachers have favorable attitudes toward the 18 identified characteristics of the Maryland Writing Test. Further, differences are suggested in the attitudes of teachers who teach different subjects toward 16, or virtually all of the 18

characteristics of the test, and that significant differences in attitudes toward one or more characteristic are suggested between teachers of mathematics and science, science and social studies, and mathematics and social studies.

Teachers' attitudes toward the characteristics of the Maryland Writing Test do not seem to vary according to the number of years they have taught. For only 3 of the 18 characteristics, was it suggested that the number of years taught and attitudes toward them were related. For the remaining characteristics, the other 15, the suggestion of independence of attitudes and number of years taught was found. From further analysis of the three characteristics for which the suggestion was found that attitude and number of years taught might not be independent, it was found that their lack of independence was not significant.

Attitudes Toward Characteristics of Maryland's Statewide Assessment

Maryland high school teachers who participated in this study indicated very clearly that some characteristics of the Maryland Writing Test were more important than other characteristics to the success it has in measuring statewide writing skills. This was seen in the very wide range of numbers and percents of teachers with favorable attitudes toward each characteristic. The characteristic ranked highest among the 18 characteristics had 528 teachers or 98.1 percent with favorable attitudes toward it while the characteristic ranked lowest had 286 or 53.2 percent with favorable attitudes toward it. This dramatic 44.9 percent range that occurred among the 18 characteristics suggests that teachers clearly discriminate among the characteristics in terms of their views about their importance to the success of the test.

The Five Most Important Characteristics of the Maryland Writing Test

It is suggested that the following five characteristics of the Maryland Writing Test are the most important to high school teachers, statewide. The characteristics are in rank order from one to five and numbered using the chronological number previously assigned to them in this research.

9. Students know score criteria before test

11. Score criteria for test are consistent over time

7. Scoring is by trained raters

6. Two raters independently score essays

16. Students have multiple opportunities to pass test

In analyzing the above characteristics that Maryland high school teachers identify as most important to the success of the Maryland Writing Test, we believe that of paramount interest to them is the issue of fairness to students since the five characteristics, considered individuality and as a group, seem concerned with the fairness of the test to students.

The Five Least Important Characteristics of the Maryland Writing Test

Below are the least important characteristics are in rank-order from 14 to 18 and numbered using the chronological number previously assigned to them in this research.

8. Raters are not Maryland teachers

4. Score scale has four score points

17. Test is most often administered by students' teachers

15. Test first given in ninth grade

13. Test is administered in two sessions

Analysis of these characteristics reveals that four of them have to do with administration and scoring. Only test first given in the ninth grade does not, and perhaps it was seen as less important than the highly rated students have multiple opportunities to pass.

Phases of Student Assessment and the Most and Least Preferred Characteristics of the Maryland Writing Test

Another way that teacher insistence on fairness is revealed about the characteristics of the Maryland Writing Test is when the 18 characteristics are grouped according to four phases of assessment. Each characteristic was arbitrarily assigned to only one of the

phases of assessment even though some of them could have been assigned to more than one because they overlap. In the list that follows, the symbols + and - indicate the five characteristics identified by Maryland high school teachers statewide as most (+) and least (-) important to the success of the Maryland Writing Test in its attempt to assess statewide writing skills.

- Test development and design

  1. Same prompts used for all students
+ 5. Score scale developed and maintained by Maryland teachers
  9. Students know score criteria before test
  12. Students must pass to graduate
- 15. Test first given in ninth grade
+ 16. Students have multiple opportunities to pass test
  18. Appeal and review is available for seniors

- Test administration

  10. During test students have scoring criteria
- 13. Test is administered in two sessions
  14. Students have unlimited time for test
- 17. Test is most often administered by students' teachers

- Assessment criteria

  2. Total scores are based on two prompts
  3. Modified holistic scoring is used
- 4. Score scale has four score points
+ 11. Score criteria for test are consistent over time

- Scoring

+ 6. Two raters independently score essays
+ 7. Scoring is by trained raters
- 8. Raters are not Maryland teachers

It can be observed from above that the characteristics of the Maryland Writing Test teachers identify as most and least important to the test are found in all four phases. This gives further indication of teachers' strong interest in fairness throughout all aspects of the test.

Thus, Maryland teachers are consistent and in their desire for a "fair test" in so far as the Maryland Writing Test is concerned since those characteristics which they say are most important compliment those which they say are least important to the success of the test. State policy makers and planners should consider fairness paramount if high school teachers' support for new assessments at the eleventh-grade level is desirable.

Recommendations for Further Research

Teachers' attitudes are important to the outcomes of education in general, and specifically to the success of assessment of student achievement. Their attitudes toward assessment have been found to affect student performance on assessments as well as the perceptions people within and outside of public education have about the results of large scale statewide assessments. Although it is understood that causal relationships in attitude research is not conclusive and should be interpreted with care, this investigation suggests further research into the contributions of the various factors identified here should be investigated.

Two lines of related inquiry are recommended. In both suggestions for further research, it may be possible to discover the contribution various factors make toward teachers' attitudes toward statewide assessments of student achievement.

The first line of recommended inquiry has to do with the degree to which factors contribute to the attitudes teachers have toward the characteristics of performance assessments. This line of research would seek to establish overall, partial, and combined portions of teachers' attitudes that are attributable to of the variables such as.

- their knowledge about assessment
- the subject they teach
- the number of years they have taught
- their happiness as teachers and/or as students
- the school climate

- their race and/or gender
- the grade level they teach

The second line of recommended inquiry is intended to inform policy makers and planners in state and local education agencies and post-secondary institutions broader statewide assessment issues not limited to those associated with a single assessment instrument as was the case in this research. Such research might examine

- teachers' overall attitudes toward statewide assessment
- the relationship between teachers' knowledge about and attitudes toward statewide assessment
- other relationships that may exist among teachers attitudes based on other variables that may be identified

Since teachers' attitudes have been found to be important to the outcomes of education, the determination of these possible relationships will inform further research into the factors that influence those attitudes.

Finally, this study's findings about acceptance of performance assessments should be the subject of other research using different methodologies, particularly across other examples. although we believe our results to be helpful to assessment policy planning, we feel least sure about whether our findings will generalize to applications in other assessment contexts and to performance assessments that are dissimilar to the Maryland Writing Test.

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Appendix A

Panel of Experts

Mr. John Brown, Supervisor of Innovative and Emerging Programs, Prince George's County Public School System, Upper Marlboro, MD.; member of the Scoring Committee for the Maryland Writing Test, Maryland State Department of Education, Baltimore, MD.

Ms. Anne Chafin, Specialist, Consultant in Research and Measurement; former Branch Chief, Program Assessment, Evaluation, and Instructional Support Branch, Maryland State Department of Education, Baltimore, MD.

Dr. Steven Ferrara, Section Chief, Measurement, Statistics, and Evaluation Section, Maryland State Department of Education, Baltimore, MD.

Dr. Belita Gordon, Associate Professor, Georgia State University, Athens, GA; Former Scoring Director for the Maryland Writing Test; Professional consultant in the holistic scoring of writing assessments for state departments of education; Head of scoring team for the Georgia Writing Assessment Program, Athens, GA.

Ms. Diane Pulling, Consultant in writing assessment; English Teacher, Howard County Public School System, Ellicott City, MD.; former Specialist in Writing Assessment, Maryland State Department of Education and former Chairperson of the Scoring Committee for the Maryland Writing Test, Maryland State Department of Education, Baltimore, MD.

Dr. Margaret Trader, Executive Director of Instruction, Washington County Public School System, Hagerstown, MD; former member of the Scoring Committee for the Maryland Writing Test, Maryland State Department of Education, Baltimore, MD.

Appendix B

The Maryland Writing Test -- Information Sheet

This information sheet is intended to provide additional information to you about characteristics of the Maryland Writing Test.

1. All students write essays in response to the same writing prompts.

   For each administration of the test all students taking the test write essays from the same written prompts.

2. Students' total scores are based on the essays they write in response to two prompts (narrative and explanatory).

   Scores for each of the two essays are averaged to obtain an overall test score for each student.

3. Modified holistic scoring is used to score students' essays.

   Narrative essays are scored on their overall success in responding to the prompt with a sequence of events with elaborated details. Explanatory essays are scored on their overall success in responding to the prompt with clear and complete details.

4. The scale used to score students' essays contains four score points.

   Each essay can receive one of the following scores: 1, 2, 3, or 4. One is the lowest score and four is the highest score.

5. The scale used to score students' essays was developed and is maintained by Maryland teachers.

   Maryland high school teachers developed the original scale used to score students' essays and still maintain it.

6. Two raters independently score each essay.

   The scores two raters independently give to each essay are averaged to obtain the score for each essay.

7. Scoring of student essays is by trained raters.

   Raters are trained in Maryland's scoring procedure and must demonstrate competency at applying Maryland's criteria for scoring Maryland Writing Test essays before scoring begins and while scoring takes place.

8. Raters are not Maryland teachers.

   Essays are scored by raters who are not Maryland teachers and who do not live in Maryland.

You may keep this page. - Do not return it with your survey.

9. Students know the criteria used to judge their essays in advance of the test.

   The criteria raters used to assign scores to students' essays are known to students before the test.

10. During the test students are provided with a checklist of scoring criteria.

    As testing begins students are given a copy of the criteria that will be used to score their essays.

11. The criteria used to judge students' essays remain constant for each administration of the test.

    The criteria used to judge students' essays do not change from one administration of the test to another.

12. Students must pass the test in order to graduate.

    Students who do not pass the Maryland Writing Test do not qualify for a high school diploma despite having met all other requirements.

13. The test is administered to students in two sessions.

    Students write one essay on each of two testing days.

14. Students have as much time as they need to complete the test.

    Other than the length of the school day there is no time limit placed on students for the completion of their essays.

15. The test is given to ninth grade students for the first time.

    The test is first administered to ninth grade students.

16. Students have multiple opportunities to pass the test.

    Students can take the test twice annually until they earn a passing score.

17. The test is administered most often by students' teachers.

    Teachers who administer the test are familiar to students taking the test.

18. Appeal and review procedures exist for seniors whose essays fail the test and who need to pass it in order to graduate.

    Procedures exist for the review of essays that receive failing scores written by seniors who need to pass the test in order to graduate.

You may keep this page. - Do not return it with your survey.

Appendix C

A Survey About the Maryland Writing Test

Directions

1. Please complete items 1 to 10 on page one. Note that items 8-10 are optional.

2. Pages 2 and 3 of the survey contain the 18 characteristics or main features of the Maryland Writing Test as judged by a panel of experts who possess unique and intimate understanding of it. For those 18 items you are asked to circle the letter that signifies the degree of **KNOWLEDGE** you possessed prior to today about each characteristic of the MARYLAND WRITING TEST.

   - A signifies that prior to today you had NO KNOWLEDGE of the characteristic
   - B signifies that prior to today you had SOME KNOWLEDGE of the characteristic
   - C signifies that prior to today you had COMPLETE KNOWLEDGE of the characteristic
   - D signifies that prior to today you had COMPLETE KNOWLEDGE of the characteristic and that YOU KNOW WHY the MARYLAND WRITING TEST possess that characteristic.

AND

3. Circle the letter that signifies the **IMPORTANCE** you feel each characteristic or main feature has to **the success of the MARYLAND WRITING TEST in its attempt to assess statewide writing skills.**

   - A signifies that you feel the characteristic is TOTAL UNIMPORTANT.
   - B signifies that you feel the characteristic is SOMEWHAT UNIMPORTANT.
   - C signifies that you feel the characteristic is IMPORTANT.
   - D signifies that you feel the characteristic is VERY IMPORTANT.
   - E signifies that you feel the characteristic is ABSOLUTELY ESSENTIAL.

   If you would like additional details about any of the characteristics of the Maryland Writing Test, please refer to the yellow Information Sheet that is enclosed in this survey packet.

4. **When you have completed the survey, please fold and return it via U.S. Mail in the postage paid envelope you will find in this packet.**

   Thank you for participating in this important project.

Dr. Richard M. Petre, Maryland School Performance Program
Dr. Daniel L. Jett, Howard County Public School System

You may keep this page. - Do not return it with your completed survey.

Information About Survey Respondents

1. Write in the **School System** in which you currently teach (e.g. Allegany County, Baltimore City, Harford County, Talbot County, etc.)

   _____

2. Write in the **total number of years** you have been a high school teacher of any subject area (s).

   _____ years

3. Circle the letter of the **one subject area** in which you teach for a **majority of the school day**. (Circle only one)

   A. English/language arts
   B. Mathematics
   C. Science
   D. Social Studies
   E. Other (Please indicate the subject area _____)

4. Circle the highest academic degree you have earned.

   Bachelor's Master's Doctorate

5. Have you earned college credit for taking one or more courses in classroom management?

   Yes No

6. Have you ever taken another course in which classroom measurement was a part?

   Yes No

7. Have you ever taken an in-service course in classroom measurement?

   Yes No

OPTIONAL -- Your response to the following items will be appreciated; however, they are optional. Please circle your response for each item you choose to answer.

8. Your sex? Female Male

9. Your race? American Indian; Asian, Black; Caucasian; Hispanic, Other

10. Are you happy being a teacher? Yes No

Please be sure to return this survey in the postage paid envelope provided.

A Survey About the Maryland Writing Test

Page 2

Characteristic	Prior Knowledge of Characteristics: None	Some knowledge	Complete knowledge	Complete knowledge and know why	Importance of Characteristics: Totally un-import.	Some what un-import.	Import.	Very Import.	Absolutely Essential
1. All students write essays in response to the same writing prompts.	A	B	C	D	A	B	C	D	E
2. Students' total scores are based on the essays they write in response to two prompts (narrative and explanatory).	A	B	C	D	A	B	C	D	E
3. Modified holistic scoring is used to score students' essays	A	B	C	D	A	B	C	D	E
4. The scale used to score students' essays contains four score points.	A	B	C	D	A	B	C	D	E
5. The scale used to score students' essays was developed and is maintained by Maryland teachers	A	B	C	D	A	B	C	D	E
6. Two readers independently score each essay.	A	B	C	D	A	B	C	D	E
7. Scoring of student essays is by trained raters.	A	B	C	D	A	B	C	D	E

A Survey About the Maryland Writing Test

Page 3

Characteristic	Prior Knowledge of Characteristics: None	Some knowledge	Complete knowledge	Complete knowledge and know why	Importance of Characteristics: Totally un-import.	Some what un-import.	Import.	Very Import.	Absolutely Essential
8. Raters are not Maryland teachers.	A	B	C	D	A	B	C	D	E
9. Students know the criteria used to judge their essays in advance of the test.	A	B	C	D	A	B	C	D	E
10. During the test students are provided with a checklist of scoring criteria.	A	B	C	D	A	B	C	D	E
11. The criteria used to judge students' essays remain constant for each administration of the test	A	B	C	D	A	B	C	D	E
12. Students must pass the test in order to graduate.	A	B	C	D	A	B	C	D	E
13. The test is administered to students in two sessions	A	B	C	D	A	B	C	D	E
14. Students have as much time as they need to complete the test	A	B	C	D	A	B	C	D	E
15. The test is given to ninth grade students or the first time.	A	B	C	D	A	B	C	D	E

A Survey About the Maryland Writing Test

Page 4

Characteristic	Prior Knowledge of Characteristics: None	Some knowledge	Complete knowledge	Complete knowledge and know why	Importance of Characteristics: Totally un-import.	Some what un-import.	Import.	Very Import.	Absolutely Essential
16. Students have multiple opportunities to pass the test.	A	B	C	D	A	B	C	D	E
17. The test is administered most often by students' teachers.	A	B	C	D	A	B	C	D	E
18. Appeal and review procedures exist for seniors whose essays fail the test and who need to pass it in order to graduate	A	B	C	D	A	B	C	D	E